

Claims

WHAT IS CLAIMED IS:

1. A portable recall device configured to be carried by a wearer comprising:

a camera; and

at least one accelerometer operably connected to the camera, the accelerometer triggering capture of an image by the camera based on detection of a capture condition followed by detection of a stable condition by the at least one accelerometer.

2. The portable recall device of claim 1 wherein the at least one accelerometer detects both the capture condition and the stable condition.

3. The portable recall device of claim 1 further comprising:
an environmental sensor that monitors ambient conditions to detect the capture condition.

4. The portable recall device of claim 1 further comprising:
an audio recording circuit recording ambient sounds, responsive to detection of the capture condition.

5. The portable recall device of claim 1 wherein the camera includes a wide-angle lens.

6. The portable recall device of claim 1 wherein the camera includes a fish-eye lens.

1 7. The portable recall device of claim 1 wherein detection of the capture
2 condition comprises detection of a change in ambient light.

3 8. The portable recall device of claim 1 wherein detection of the capture
4 condition comprises detection of a change in ambient sound.

5 9. The portable recall device of claim 1 wherein detection of the capture
6 condition comprises detection of a change in ambient temperature.

7 10. The portable recall device of claim 1 wherein detection of the capture
8 condition comprises detection of a change in motion of the wearer.

9 11. The portable recall device of claim 1 wherein detection of the capture
10 condition comprises detection of a change in heart rate of the wearer.

11 12. The portable recall device of claim 1 wherein detection of the stable
12 condition comprises detection of a signal from the at least one accelerometer
13 indicating that camera acceleration is below a defined threshold.

14 13. The portable recall device of claim 1 wherein the at least one
15 accelerometer comprises:

16 a plurality of accelerometers, each accelerometer oriented to detect
17 acceleration along different axis, wherein detection of the stable condition
18 comprises detection of a signal from each accelerometer indicating that camera
19 acceleration is below a defined threshold in each axis.
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1 14. The portable recall device of claim 1 further comprising:
2 a gyroscope, wherein detection of the stable condition comprises detection
3 of a signal from the gyroscope indicating that yawing movement of the camera is
4 below a defined threshold.

5 15. The portable recall device of claim 1 wherein detection of the capture
6 condition comprises detection of a change in ambient light and the triggering of
7 the capture of the image is delayed by at least a predefined delay period after the
8 detection of the capture condition.

9 16. The portable recall device of claim 1 wherein detection of the capture
10 condition comprises detection of a change in a signal from a passive infra red
11 detector triggered by heat from a person in the proximity of the recall device.
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1 17. A method comprising:
2 monitoring acceleration of a camera along at least one axis using an
3 accelerometer;
4 detecting a capture condition experienced by the camera;
5 detecting a stable condition by the at least one accelerometer along the at
6 least one axis, responsive to the operation of detecting the capture condition; and
7 triggering capture of an image by the camera based on detection of the
8 capture condition followed by detection of the stable condition.
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10 18. The method of claim 17 wherein the at least one accelerometer detects
11 both the capture condition and the stable condition.

12 19. The method of claim 17 wherein detecting the capture condition
13 comprises:
14 monitoring ambient conditions with an environmental sensor to detect the
15 capture condition.
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17 20. The method of claim 17 further comprising:
18 recording ambient sounds responsive to detection of the capture condition.

19 21. The method of claim 17 wherein the camera includes a wide-angle lens.

20 22. The method of claim 17 wherein the camera includes a fish-eye lens.
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22 23. The method of claim 17 wherein detecting the capture condition
23 comprises:
24 detecting a change in ambient light.
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1 24.The method of claim 17 wherein detecting the capture condition
2 comprises:

3 detecting a change in ambient sound.

4 25.The method of claim 17 wherein detecting the capture condition
5 comprises:

6 detecting a change in ambient temperature.

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8 26.. The method of claim 17 wherein detecting the capture condition
9 comprises:

10 detecting of a change in motion of the wearer.

11 27.The method of claim 17 wherein detecting the capture condition
12 comprises:

13 detecting of a change in heart rate of the wearer.

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15 28.The method of claim 17 wherein detecting the stable condition
16 comprises:

17 detecting a signal from the at least one accelerator that indicates that
18 acceleration of the camera is below a defined threshold.

19 29.The method of claim 17 wherein detecting the stable condition
20 comprises:

21 detecting a signal from a gyroscope that indicates that yawing movement of
22 the camera is below a defined threshold.

1 30. The method of claim 17 wherein detecting the capture condition
2 comprises:

3 detecting a change in ambient light, and triggering of the capture of the
4 image is delayed by at least predefined delay period after the detection of the
5 capture condition.

6 31. The method of claim 17 further comprising:

7 reviewing in sequence a plurality of captured images downloaded from the
8 portable recall device.
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1 32. The computer program product encodes a computer program for
2 executing a computer process on a computer system, the computer process
3 comprising:

4 monitoring acceleration of a camera along at least one axis using an
5 accelerometer;

6 detecting a capture condition experienced by the camera;

7 detecting a stable condition detected by the at least one accelerometer along
8 the at least one axis, responsive to the operation of detecting the capture condition;
9 and

10 triggering capture of an image by the camera based on detection of the
11 capture condition followed by detection of the stable condition.
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1 33. A digital media player configured to be carried by a wearer comprising:

2 a camera; and

3 at least one accelerometer operably connected to the camera, the
4 accelerometer triggering capture of an image by the camera based on detection of
5 a capture condition followed by detection of a stable condition by the at least one
6 accelerometer.

1 34. A portable recall device configured to be carried by a wearer
2 comprising:

3 a camera;

4 at least one accelerometer operably connected to the camera, the
5 accelerometer triggering capture of an image by the camera based on detection of
6 a stable condition by the at least one accelerometer; and

7 a memory maintaining storage of the image, responsive to the triggering of
8 the capture of image, if a capture condition is detected in temporal proximity of
9 the capture; the memory deleting the storage of the image if no capture condition
10 is detected in a defined temporal proximity of the capture.

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12 35. The portable recall device of claim 34 wherein the image is one image
13 of a video sequence.

14 36. The portable recall device of claim 34 further comprising:

15 an audio recording circuit recording ambient sounds, wherein the memory
16 further maintains storage of the recorded ambient sounds if the capture condition
17 is detected in temporal proximity of the capture; the memory deleting the storage
18 of the recorded ambient sounds if no capture condition is detected in the temporal
19 proximity of the capture.

1 37. A method comprising:
2 monitoring acceleration of a camera along at least one axis using an
3 accelerometer;
4 detecting a stable condition by the at least one accelerometer along the at
5 least one axis;
6 triggering capture of an image by the camera into memory based on
7 detection of the stable condition; and
8 deleting the image from the memory if a capture condition is not detected
9 in a defined temporal proximity of the capture.
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11 38. The method of claim 37 wherein the image is one image of a video
12 sequence.

13 39. The method of claim 37 further comprising:
14 recording ambient sounds in a memory; and
15 deleting the recorded ambient sounds if no capture condition is detected in
16 temporal proximity of the capture.
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1 40. The computer program product encodes a computer program for
2 executing a computer process on a computer system, the computer process
3 comprising:

4 monitoring acceleration of a camera along at least one axis using an
5 accelerometer;

6 detecting a stable condition by the at least one accelerometer along the at
7 least one axis;

8 triggering capture of an image by the camera into memory based on
9 detection of the stable condition; and

10 deleting the image from the memory if a capture condition is not detected
11 in a defined temporal proximity of the capture.

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13 41. The computer program product of claim 40 wherein the image is one
14 image of a video sequence.

15 42. The computer program product of claim 40 wherein the computer
16 process further comprises:

17 recording ambient sounds in the memory; and

18 deleting the recorded ambient sounds from the memory if no capture
19 condition is detected in temporal proximity of the capture.
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1 43. A digital media player configured to be carried by a wearer comprising:

2 a camera;

3 at least one accelerometer operably connected to the camera, the
4 accelerometer triggering capture of an image by the camera based on detection of
5 a stable condition by the at least one accelerometer; and

6 a memory storing the captured image, responsive to the triggering of the
7 capture of image, if a capture condition is detected in temporal proximity of the
8 capture; the memory deleting the storage of the image if no capture condition is
9 detected in a defined temporal proximity of the capture.
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